Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants: NANGALIA et al.

Application Serial No.: 10/727,418

Filing Date: December 4, 2003

For: METHODS AND APPARATUS FOR ROUTING SECURITIES ORDERS

Group Art Unit: 3621

Examiner: Salvatore A. Cangialosi

SECOND APPEAL BRIEF

Attorney Docket No.: G08.071

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Sir:

Appellants hereby appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner in the Office Action mailed April 11, 2006 (the "2006 Office Action"), rejecting claims 1-8, 19-26, 37, 38, 43 and 44.

REAL PARTY IN INTEREST

The present application is assigned to GOLDMAN, SACHS & CO., 85 Broad Street, New York, New York 10004, U.S.A.

RELATED APPEALS AND INTERFERENCES

No other appeals or interferences are known to Appellants, Appellants' legal representative, or assignee, which will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

STATUS OF CLAIMS

Claims 1-8, 19-26, 37, 38, 43 and 44 are pending in this application. All pending claims stand rejected and are now being appealed.

Claims 9-18, 27-36, 39-42 and 45-54 have previously been canceled.

STATUS OF AMENDMENTS

No amendments were filed after the 2006 Office Action or are now pending.

SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is concerned with a securities trading system. (FIG. 1; specification, page 4, lines 6-13) More particularly, the invention is concerned with a portion of a trading system that is referred to as a "router". (Specification, page 4, lines 13-15). A router receives an order from another portion of the trading system known as the execution core and determines how the order is to be routed. (Specification, page 4, lines 20-22) "Routing" an order involves determining an order destination, such as a securities exchange or an ECN[1], to

[1] "ECN" is a term of art in the securities industry that refers to private electronic networks that allow for placement of securities trading orders and are fully automated to match orders and set prices for trades without the intervention

which the order is to be sent, and determining the respective proportions of the order to be allocated among order destinations, if the order is to be divided between two or more order destinations. (Specification, page 4, lines 22-25; page 2, lines 3-4)

The invention departs from conventional practices by recognizing that order routing determinations may be usefully made based on dynamically updated information about market conditions in addition to order price and size of orders pending on an order destination. Examples of such information are the percentage of total market volume in the security handled by a particular order destination, and the degree to which an order destination is "overfilling" orders[2], as well as other types of information listed at page 2, lines 7-19 of the specification. With use of dynamically updated information beyond order price and size, improved order execution performance may be achieved, as to either or both of price obtained and speed of execution. (Specification, page 2, lines 20-26)

Appellants will next set forth the corresponding acts described in the specification for each of the step plus function limitations of the independent method claims.

Claim 1

"Determining during a trading session an attribute of a securities exchange or ECN, the determined attribute not being any one of: a quoted security price, an order size and an average response time"—specification, page 1, lines 19-22; page 2, lines 3-19; FIG. 8, block 806; FIG. 3, items 304, 306, 308, 310; FIG. 4, items 402, 404, 406, 408.

"Determining during the trading session, based at least in part on the determined attribute, at least one of: (a) whether to route an order to the securities exchange or ECN, and (b) a proportion of the order to allocate to the securities exchange or ECN"—specification, page 1, line 19 to page 2, line 4.

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of market makers. (The acronym ECN originated as an abbreviation for "electronic communication network".) (Specification, page 1, lines 10-13)

[2] An order is "overfilled" when the size of the order exceeds the size of the orders on the order book of the order destination, but the order is nonetheless filled in excess of the size of the orders on the order book.

Claim 7

"Determining during a trading session at least one attribute of a securities exchange or ECN"—specification, page 1, line 19 to page 2, line 4; FIG. 8, block 8; FIG. 3, items 304, 306, 308, 310; FIG. 4, items 402, 404, 406, 408.

"Determining during the trading session, based at least in part on the determined at least one attribute, at least one of: (a) whether to route an order to the securities exchange or ECN, and (b) a proportion of the order to allocate to the securities exchange or ECN"—specification, page 1, line 19 to page 2, line 4.

"The determined at least one attribute selected from the group consisting of: (a) a percentage of total market volume in the particular security handled during the trading session by the securities exchange or ECN; (b) a degree to which the securities exchange or ECN is overfilling orders for the particular security during the trading session; (c) an average amount of time that the securities exchange or ECN offered a best price for the particular security relative to other order destinations; (d) a percentage of the trading session during which the securities exchange or ECN offered a best price for the particular security relative to other order destinations; (e) a number of times during the trading session at which the securities exchange or ECN offered a best price for the particular security relative to other order destinations; and (f) an average amount of time required during the trading session for the securities exchange or ECN to match a best price offered for the particular security by another order destination"—specification, page 2, lines 7-19.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

(1) Claims 1-8, 37, 38, 43 and 44 are rejected under 35 USC § 101 as being directed to non-statutory subject matter.

(2) Claims 1-8, 19-26, 37, 38, 43 and 44 are rejected under 35 U.S.C. § 103 [sic: 103(a)] as being unpatentable over either one of Waelbroeck et al. (2002/0010672) and Waelbroeck et al. (2002/0052827).

(3) Claims 1-6, 19-24, 37 and 38 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement.

ARGUMENT

I. The Statutory Subject Matter Rejection is Improper and Conflicts with Findings Made by the Examiner

Appellants choose to argue as a group, for purposes of the § 101 rejection, all of the claims rejected under that section. Claim 1 is taken as exemplary of this group of claims.

A. The § 101 rejection is inconsistent with Examiner's own findings.

(1) The Examiner has found the subject matter of claim 1 to satisfy the judicially mandated test for statutory subject matter.

A brief review of the course of prosecution of this case is illustrative of this point. The first Office Action on the merits issued in this case, dated June 8, 2005, contained a rejection under § 101 of claims 1-8, 37, 38, 43 and 44 as being directed to non-statutory subject matter.[3] This rejection was based on the now-discredited (and never well-founded) "two-prong test": (a) whether the invention is within the technological arts; and (b) whether the invention produces a useful, concrete and tangible result. In the last paragraph of page 2 and the first paragraph of page 3 of the June 8 Office Action (quoted immediately below) the Examiner unambiguously, if somewhat ungrammatically, held that the claimed invention satisfied the second prong of the test in that it produced a useful, concrete and tangible result:

> Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete and tangible result. In the present case, the claimed invention order routing determination (i.e. useful and tangible). [sic: sentence fragment in original]

[3] Then, as now, apparatus claims 19-26 were not rejected under § 101, even though directed to essentially the same invention as the claims rejected under § 101. Applicants will say more concerning this point below.

> Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claim 1 is deemed to be directed to non-statutory subject matter. [Emphasis added]

In response to the June 8 Office Action, the appellants argued in detail[4] that the two-prong test, and particularly the "technological arts" prong thereof, was inconsistent with the controlling Federal Circuit cases, State Street[5] and AT&T[6]. In our arguments, appellants pointed out that the State Street and AT&T cases both teach that machine and process claims should be subject to one standard on the § 101 question--do the claims produce a useful, concrete and tangible result? The Examiner's application of the "technological arts" test was improper and inconsistent with controlling case law, and the recited claims were statutory since they satisfied (as the Examiner conceded) the "useful, concrete and tangible" standard.

In October of last year, this Honorable Board validated appellants' position on the impropriety of the "technological arts" requirement in the widely noted Lundgren decision[7]. In Lundgren this Honorable Board clearly held that "there is currently no judicially recognized separate 'technological arts' test to determine patent eligible subject matter under § 101". The Board also declined to create such a test. Citing the AT&T case, the Board confirmed that the applicable standard was whether a useful, concrete and tangible result was produced.

In the Final Office Action issued herein on November 14, 2005, the Examiner again stated a rejection under § 101.[8] This time the statement of the standard for statutory subject matter was correct--namely, "whether the invention produces a useful, concrete and tangible result"--with the now discredited "technological arts" prong removed. But, surprisingly, the change in purported standard did not change the result, notwithstanding that the Examiner had previously (and as noted above) expressly found that that standard was satisfied by the claimed invention. Rather, the Examiner imported reasoning he previously utilized in connection with

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[4] In an Amendment dated August 29, 2005.

[5] *State Street Bank & Trust Company v. Signature Financial Group, Inc*, 149 F. 3d 1368 (Fed. Cir. 1998).

[6] *AT&T Corp. v. Excel Communications, Inc.*, 172 F. 3d 1352 (Fed. Cir. 1999).

[7] Appeal No. 2003-2088 (2005).

[8] This same rejection is repeated *verbatim* in the 2006 Office Action, now appealed from.

the technological arts test to justify the *sub rosa* change in his position. Specifically, the Examiner found the result of the claimed invention not to be "tangible" because "all of the recited steps can be performed in the mind of the user or by use of a pencil and paper"--exactly the same formula he had previously used in connection with the now-forbidden "technological arts" test.[9] In other words, the Examiner applied the same test as before, but under a different label. Surely such a result is not what this Honorable Board had in mind when it dispatched the "technological arts" canard in the Lundgren decision.

Moreover, the Examiner did not explain, or even acknowledge, his change of position in regard to the invention of claim 1 satisfying the "useful, concrete and tangible" standard.[10] Neither did the Examiner seek to justify his importation of reasoning from the discredited "technological arts" test into his present finding of non-compliance with the "useful, concrete and tangible result" test. It is hard to escape the conclusion that this arbitrary reversal of course was for the purpose of maintaining the improper § 101 rejection, even after this Honorable Board threw out the "technological arts" test in Lundgren. The Board should not permit such flim-flammery to succeed.

(2) The Examiner has found to be statutory the same subject matter when recited in apparatus claims.

At the same time that the Examiner has rejected claims 1-8, 37, 38, 43 and 44 as allegedly non-statutory, he has not applied such a rejection to apparatus claims 19-26, even though claims 19-26 are directed to the same subject matter as the allegedly non-statutory claims. Thus the Examiner apparently believes that the form of the claim--apparatus or process--is relevant to determining whether the claim is statutory under § 101. This is directly contrary to the directive of the Federal Circuit, stated in the AT&T case, that "the scope of § 101 [is] the same regardless of the form--machine or process--in which a particular claim is drafted."[11] Once

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[9] Compare page 2, third line from the bottom of the page, of the Final Office Action with page 2, fourth line from the bottom of the page, of the June Office Action.

[10] This change of position cannot be ascribed to changes in the claims in the appellants' response to the June Office Action. Those changes were (a) replacing "order destination" with the narrower limitation "securities exchange or ECN", and (b) excluding "average response time" from the possible securities exchange/ECN attributes that may be determined in the first method step.

[11] 172 F.3d at 1357.

again the Examiner's findings are inconsistent with each other. If the apparatus claims 19-26 are directed to statutory subject matter, as the Examiner evidently believes they are, then it was improper to reject claims 1-8, 37, 38, 43 and 44 as non-statutory, since the latter claims differ only in form from claims 19-26. It appears that the Examiner is improperly continuing to give force to the now-discredited "technological arts" test, wherein the Examining Corps generally considered apparatus claims to be "technological" while holding parallel method claims non-technological. This Honorable Board is respectfully requested to recognize and dispel the lingering *sub rosa* effects of the "technological arts" test.

B. The rejection under § 101 is contrary to the governing law.

Appellants will now go beyond showing that the pending statutory subject matter rejection is muddled and inconsistent in its application of the "useful, concrete, tangible result" standard. In particular, appellants will now demonstrate that the Examiner's finding that claim 1 does not satisfy § 101 is directly contrary to the applicable law as set forth in the State Street and AT&T cases.

In State Street the claimed invention was directed to a system that allows an administrator to monitor and record financial information flow and to make calculations necessary for maintaining a partner fund financial services configuration. Such a configuration allows several mutual funds ("Spokes") to pool investment funds into a single portfolio (the "Hub"). The system in State Street provides for daily allocation of assets for two or more Spokes that are invested in the same Hub. The system also allows for allocation of the Hub's daily income, expenses and gains or losses among the Spokes.

The subject matter of the patent at issue in State Street cannot be distinguished for § 101 purposes in any principled way from the method recited in claim 1. Both are concerned with determinations related to financial affairs. If, as held in State Street, the result of the patented system therein--a final share price--is "useful, concrete and tangible", no less is the case for the determination of how or in what proportions to route an order to a securities exchange or ECN. Both the method of claim 1 of the present application and the system at issue in State Street produce "real world" information that is of value in conducting investment-related activities. Neither is abstract.

Every argument made by the Examiner against the present claim 1 could equally well have been made against the system upheld in State Street. For example, the Examiner asserts that "all of the recited steps can be performed in the mind of the user or by use of a pencil and paper". But such could also have been said about the system in State Street. Noting that, under the AT&T case, the form of the claim, i.e., method versus apparatus, is not relevant to whether the claim is statutory, the method claims now rejected under § 101 are as entitled to be held statutory as the apparatus claims upheld in State Street. Moreover, as much as in the system in State Street[12], the determinations made in the present claim 1 must be performed quickly and accurately and virtually require a computer.

In short, the present claim 1 easily falls within the category of subject matter held to be statutory in State Street. The Examiner's finding that claims 1-8, 37, 38, 43 and 44 are not statutory is inconsistent with State Street and should be reversed.

II. The Pending Claims are Patentable Over the Prior Art Applied by the Examiner

A. Applicable law.

The law governing application of 35 U.S.C. § 103(a) is set forth in general terms as follows in *In re Kotzab*, 217 F.3d 1365 (Fed.Cir. 2000):

> A claimed invention is unpatentable if the differences between it and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art [citing § 103(a)].

In comparing the claimed invention with the prior art, both the claimed subject matter as a whole and the prior art as a whole must be considered. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143 (Fed.Cir. 1985).

[12] 149 F.3d at 1371.

B. General description of prior art applied by the Examiner.

The Examiner bases his rejection on either one of published patent applications 2002/0010672 (the '672 reference) and 2002/0052827 (the '827 reference), both naming Waelbroeck et al. as inventors. There is substantial overlap in the disclosure of the two references. Both Waelbroeck references are primarily concerned with exchanging information--sometimes referred to as Certified Trading Interest data--between potential counterparties to securities trading transactions ('672, paragraph 0025; '827, paragraph 25). The exchange of information may lead to routing of a securities trading offer from one trading party to a potential counterparty ('672, paragraph 0075; '827, paragraph 0093). To some extent the '827 reference is also concerned with matching orders at a securities trading market place ('827, paragraph 0204).

In what appellants believe is the most nearly pertinent disclosure of the references ('672, paragraphs 0062-0067, FIG. 5; '827, paragraphs 0076-0081, FIG. 5), potential counterparties for an order are ranked according to a number of attributes of the potential counterparties. These attributes include recent trading volume, pricing behavior and the timing of the most recent trade of the potential counterparty. The order is then routed to the highest ranking potential counterparty.[13]

C. Comparison of claimed subject matter with prior art applied by Examiner

(1) Claims 1-6, 19-24, 37 and 38

Claim 1 is taken as exemplary of the group of claims consisting of claims 1-6, 19-24, 37 and 38.[14] Limitations of claim 1 have been described above at page 3, but can be summarized as follows. According to claim 1, it is determined whether to route or allocate an order to a securities exchange or ECN based on an attribute of the securities exchange/ECN other than a quoted security price, order size or average response time.

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[13] FIG. 6 of both Waelbroeck references shows a minor variation on the embodiment of FIG. 5. According to the embodiment of FIG. 6, if routing the order to the highest ranked potential counterparty does not result in, execution of the order, then the order is routed to the next highest ranked counterparty, and so forth until the order is executed. See '672, paragraphs 0069-0070 and '827, paragraphs 0083-0084.

[14] As indicated below, claims 6 and 24 will also be argued separately, together with claims 7, 8, 25, 26, 43 and 44.

By contrast, the Waelbroeck references are concerned with a different problem from that addressed by the present invention. That is, the references are concerned with disseminating information, or routing orders, to potential counterparties, rather than determining whether an order is to be routed or allocated to a particular securities exchange or ECN. Moreover, the references also fail to indicate that the routing/allocation determination is to be made based on an attribute of a securities exchange other than quoted price, order size or average response time.

Still further, there is nothing in the Waelbroeck references or elsewhere in the prior art to teach or suggest that the counterparty-finding processes of Waelbroeck be modified so as to be applicable to securities exchanges or ECNs, which are a completely different category of entity from the counterparties ("market participants" in terms used by the references) sought in Waelbroeck's processes. Also, there is nothing in the prior art to suggest modification of the references' teachings to take into account, in routing or allocating orders to securities exchanges/ECNs, the class of securities exchange/ECN attributes defined in claim 1.[15]

Thus, the teachings of the references applied by the Examiner differ in significant respects from the subject matter recited in claim 1, and there is nothing in the prior art of record that would suggest modifying the teachings in the references to provide the claimed subject matter. The claimed subject matter, considered as a whole, is not obvious in view of the prior art, also considered as a whole. It follows that this Honorable Board should reverse the rejection of claims 1-6, 19-24, 37 and 38.

(2) Claims 6-8, 24-26, 43 and 44[16]

Claim 7 is taken as exemplary of the group of claims consisting of claims 6-8, 24-26, 43 and 44. Limitations of claim 7 have been set forth above at page 4. Claim 7 differs from claim 1 principally in that claim 7 enumerates a specific type or types of securities exchange/ECN attribute upon which a determination is made whether to route or allocate an order to a securities exchange or ECN.

The Waelbroeck references do not disclose or suggest any one of the securities exchange/ECN attributes enumerated in claim 7. By the same token, the references also lack any disclosure of determining one or more of the enumerated attributes, nor determining whether to

[15] That class of attributes being attributes other than quoted security price, order size and average response time.

[16] Patentability of claims 6 and 24 was argued in the previous section, but is now argued on additional grounds.

route or allocate an order to a securities exchange or ECN based upon one or more of the enumerated attributes. More generally, and as pointed out in connection with claim 1, the references are concerned with exchanging information with, or routing orders to, potential counterparties, not with determining whether to route or allocate orders to securities exchanges or ECNs.

Nothing in the prior art suggests that the processes of the Waelbroeck references be modified to (a) be concerned with routing or allocating orders to securities exchanges or ECNs rather than counterparties, or (b) determine, or make a determination based on, one or more of the particular securities exchange/ECN attributes enumerated in claim 7. It is therefore respectfully requested that this Honorable Board reverse the rejection of claim 6-8, 24-26, 43 and 44.

D. Errors and omissions in the Examiner's comparison of claims 1 and 7 with the Waelbroeck references.

Appellants have compared claims 1 and 7 to the prior art applied by the Examiner and shown how the claims are not obvious in light of the prior art. Appellants will now go on to point out specific errors in the Examiner's purported comparison of the claims with the references.

For convenience of reference, appellants will now quote the entire portion of the rejection that is applicable to claim 1:

> Regarding claim 1, Waelbroeck et al[.] [citation to portions of the references omitted but discussed below] disclose a method of determining during a trading session whether to route and [sic: an] order based on Certified Trading Interest data including activity history, full or partial execution substantially as claimed. The differences [sic] between the above and the claimed invention is the use of the term attributes. It is noted that it is believed that the CTI data shown are functionally equivalent to attributes. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for either Waelbroeck et al because the order routing shown in the prior art is equivalent to the claim limitations.[17]

[17] See Final Office Action, bottom of page 3 to top of page 4.

The most basic error in the Examiner's discussion of claim 1 lies in his failure to note the distinction between attributes of securities exchanges/ECNs and attributes of "market participants". The latter term, as defined and used in the references, simply does not include securities exchanges or ECNs. In this regard, appellants respectfully direct this Honorable Board to the definition of "market participant" which appears at paragraph 0004 of the '672 reference and which is quoted immediately below.

> As used herein, the term "market participant" refers to any person or firm with the ability to trade securities; examples of market participants include broker-dealers, buy-side firms, sell-side firms and private investors trading on electronic communication networks (ECNs).

It is evident that securities exchanges and ECNs do not fall within this definition, since securities exchanges and ECNs do not trade securities; rather securities exchanges and ECNs only facilitate trading in securities by allowing buy orders to be matched to sell orders. While ECNs are mentioned in this definition, it is not for the purpose of including ECNs in the category of "market participant". To the contrary, ECNs are mentioned only as the forum in which a certain class of market participants engages in trading. It is an elementary mistake on the Examiner's part to read this definition of market participant as encompassing ECNs.

In his sole attempt to engage the arguments presented by appellants in their submission of August 2005, the Examiner reaches for other passages in the references to support his erroneous contention that the Waelbroeck references "clearly show that ECN [sic] or exchanges are contemplated as market participants"[18]. However, these passages do not provide support for the Examiner's position. The cited passages include paragraph 4 of the'672 reference, which has been discussed in the previous two paragraphs of this Brief.

In paragraph 25 of '672, ECNs and exchanges are referred to, but not in any way that suggests the same are considered by Waelbroeck et al. to be market participants. Instead, ECNs and exchanges are stated to be sources of data about positions held, trades executed and active orders of users of the system. Thus, ECNs and exchanges are sources of information concerning

[18] See the first three lines of page 11 of the Final Office Action.

attributes or market participants but are not themselves market participants. The reference to ECNs in paragraph 102[19] of '672 is to similar effect.

In paragraph 110 of '827, ECNs and exchanges are also referred to, but again not in a manner to indicate that ECNs and exchanges are "market participants". Rather, ECNs and exchanges are identified as alternative environments in which Waelbroeck's information exchange and order matching process between market participants may be implemented. It appears that with respect to this and other passages cited by the Examiner to support his contention, he has merely recognized the presence of the term "ECN" or "exchange" without considering whether the sense of the passage actually provides any support for his position.

In other respects, the Examiner's failure to properly consider the claims of this application seems bound up with his failure to distinguish between "market participants" and ECNs/securities exchanges, and to note the difference between routing orders to the former and the latter. It is notable that the Examiner's purported discussion of the claims almost completely lacks reference to the actual claim language. He relies primarily on FIGS. 5 and 6 of both references, and string-cites paragraphs 62-77 of '672 and the corresponding paragraphs of '827 and the claims of both references.[20] The most pertinent parts of these sections of the references have been discussed hereinabove at page 10 and in footnote 13 and the distinctions between the claim 1 and the references' disclosure have been pointed out.

In regard to claim 7 and related claims, the Examiner completely fails to address the specific ECN/securities exchange attributes enumerated in those claims. At best he offers a blanket statement that the Certified Trading Interest (CTI) data is "a functional equivalent" of the claim limitations, thereby ignoring once again the fact that the attributes represented by CTI data are attributes of market participants whereas the attributes listed in claim 7 are attributes of an ECN/securities exchange.

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[19] Equivalent to the also-cited paragraph 134 of '827.

[20] His citation of the claims of '827 is particularly unhelpful, since those claims cover more than four pages and do not in general appear related to determining attributes of ECNs/securities exchanges or determining whether to route or allocate an order to an ECN or securities exchange based on one or more attributes of an ECN/securities exchange. Claim 28 of '827 refers to sending out a portion of an order to a "third party system" but does not indicate how it is determined whether or to what extent the order is to be partially sent to the third party system. Claim 64 of '827 indicates that information about order condition may be transmitted to an "electronic trading system" (i.e., an ECN), but claim 64 does not indicate how it is determined whether to transmit information to an electronic trading system or how the electronic trading system is selected.

To summarize, the Examiner's consideration in the Final Office Action of the claims of this application was superficial and erroneous, and failed to take into account the substantial differences between the claimed subject matter and the disclosures of the references.

III. Claims 1-6, 19-24, 37 and 38 are thoroughly supported by the disclosure of this application

The Section 112, first paragraph, rejection now appealed from was stated for the first time in the 2006 Office Action, which was issued in response to the first Appeal Brief filed herein[21]. This rejection appears to challenge (though without any sound basis) claim amendments submitted in the Amendment filed herein by appellants on August 29, 2005.[22] These claim amendments resulted, for example, in the following limitations in claim 1--"determining during a trading session an attribute of a securities exchange or ECN, the determined attribute not being any one of: a quoted security price, an order size and an average response time"--by adding the language "an average response time".

A short and (appellants believe complete) answer to this rejection is that this claim amendment is fully supported by the paragraph which appears at page 2, line 7 of the specification of this application, now quoted *verbatim*:

> In some aspects, the determined attribute may be one or more of: (a) an average response time exhibited by the order destination during the trading session in regard to orders for a particular security; (b) a percentage of total market volume in the particular security handled during the trading session by the order destination; (c) a degree to which the order destination is overfilling orders for the particular security during the trading session; (d) an average amount of time that the order destination

[21] on January 26, 2006.

[22] It is difficult for appellants to avoid the impression that this johnny-come-lately rejection was conjured up simply to avoid the substance of the arguments submitted by appellants in the first Appeal Brief. In a most disappointing failure by the Examiner to advance this application toward disposition, the Examiner stated at page 12 of the 2006 Office Action, "[a]pplicants[']] arguments dated 1/30/06 have been considered but are deemed without merit since the applicant argues an invention lacking support in the specification and based entirely on mew [sic: new] matter." This statement, even if somehow defensible as to the claims actually rejected under § 112, provides no basis whatever for Examiner not to address appellants' arguments as to the claims argued in the first Appeal Brief and not now rejected under § 112. These claims are claims 7, 8, 25, 26, 43 and 44. Given the gyrations observed in other cases appealed from Group 3600, appellants are left with the suspicion that the Examiner merely wishes to postpone, perhaps indefinitely, consideration of the merits of this case by this Honorable Board.

> offered a best price for the particular security relative to other order destinations; (e) a percentage of the trading session during which the order destination offered a best price for the particular security relative to other order destinations; (f) a number of times during the trading session at which the order destination offered a best price for the particular security relative to other order destinations; and (g) an average amount of time required during the trading session for the order destination to match a best price offered for the particular security by another order destination. [Emphasis added]

Thus, among the many embodiments disclosed by this paragraph is one in which the only attribute determined is "a percentage of total market volume in the particular security handled during the trading session by the order destination". This embodiment (along with many others disclosed by this paragraph) provides full support for the limitation of "the determined attribute not being any one of: a quoted security price, an order size and an average response time". The purported rejection under § 112, first paragraph, is utterly without merit and should be summarily reversed. The Examiner's attempt to play "Gotcha!" in this manner is doomed to failure.

CONCLUSION

The rejections of claims 1-8, 19-26, 37, 38, 43 and 44 are improper in view of (a) the statutory nature of the claimed subject matter, (b) the nonobvious differences between the claimed subject matter and the prior art, and (c) the full support for the claims in the disclosure of this application.

This Brief is filed contemporaneously with appellants' Second Notice of Appeal herein. No fees are believed due either for the Second Notice of Appeal or for this Second Appeal Brief, in view of the fees having previously been paid with the Notice of Appeal filed on December 6, 2005 and the Appeal Brief filed on January 26, 2006. However, if any additional fees are due in conjunction with this matter, the Commissioner is hereby authorized to charge them to Deposit Account 50-1852. An Appendix of claims involved in this appeal is attached hereto.

If any issues remain, or if the Examiner or the Board has any further suggestions for expediting allowance of the present application, kindly contact the undersigned using the information provided below.

Respectfully submitted,

April 18, 2006
Date

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Attachment: Appendix of claims

APPENDIX A--CLAIMS

1. A method comprising:

determining during a trading session an attribute of a securities exchange or ECN, the determined attribute not being any one of: a quoted security price, an order size and an average response time; and

determining during the trading session, based at least in part on the determined attribute, at least one of: (a) whether to route an order to the securities exchange or ECN, and (b) a proportion of the order to allocate to the securities exchange or ECN.

2. A method according to claim 1, further comprising:

routing at least part of the order to the securities exchange or ECN.

3. A method according to claim 1, wherein the determined attribute relates to trading of only one security.

4. A method according to claim 1, wherein the determined attribute relates to trading of a plurality of securities.

5. A method according to claim 4, wherein the determined attribute relates to trading of all securities traded at the securities exchange or ECN.

6. A method according to claim 1, wherein the determined attribute is selected from the group consisting of: (a) a percentage of total market volume in the particular security handled during the trading session by the securities exchange or ECN; (b) a degree to which the securities exchange or ECN is overfilling orders for the particular security during the trading session; (c) an average amount of time that the securities exchange or ECN offered a best price for the

particular security relative to other order destinations; (d) a percentage of the trading session during which the securities exchange or ECN offered a best price for the particular security relative to other order destinations; (e) a number of times during the trading session at which the securities exchange or ECN offered a best price for the particular security relative to other order destinations; and (f) an average amount of time required during the trading session for the securities exchange or ECN to match a best price offered for the particular security by another order destination.

7. A method comprising:

determining during a trading session at least one attribute of a securities exchange or ECN; and

determining during the trading session, based at least in part on the determined at least one attribute, at least one of: (a) whether to route an order to the securities exchange or ECN, and (b) a proportion of the order to allocate to the securities exchange or ECN;

the determined at least one attribute selected from the group consisting of: (a) a percentage of total market volume in the particular security handled during the trading session by the securities exchange or ECN; (b) a degree to which the securities exchange or ECN is overfilling orders for the particular security during the trading session; (c) an average amount of time that the securities exchange or ECN offered a best price for the particular security relative to other order destinations; (d) a percentage of the trading session during which the securities exchange or ECN offered a best price for the particular security relative to other order destinations; (e) a number of times during the trading session at which the securities exchange or ECN offered a best price for the particular security relative to other order destinations; and (f) an average amount of time required during the trading session for the securities exchange or ECN to match a best price offered for the particular security by another order destination.

8. A method according to claim 7, further comprising:

routing at least part of the order to the securities exchange or ECN.

9-18. (Canceled).

19. An apparatus comprising:

a processor; and

a storage device in communication with said processor and storing instructions adapted to be executed by said processor to:

determine during a trading session an attribute of a securities exchange or ECN, the determined attribute not being any one of: a quoted security price, an order size and an average response time; and

determine during the trading session, based at least in part on the determined attribute, at least one of: (a) whether to route an order to the securities exchange or ECN, and (b) a proportion of the order to allocate to the securities exchange or ECN.

20. An apparatus according to claim 19, the instructions further adapted to be executed to:

route at least part of the order to the securities exchange or ECN.

21. An apparatus according to claim 19, wherein the determined attribute relates to trading of only one security.

22. An apparatus according to claim 19, wherein the determined attribute relates to trading of a plurality of securities.

23. An apparatus according to claim 22, wherein the determined attribute relates to trading of all securities traded at the securities exchange or ECN.

24. An apparatus according to claim 19, wherein the determined attribute is selected from the group consisting of: (a) a percentage of total market volume in the particular security handled during the trading session by the securities exchange or ECN; (b) a degree to which the securities exchange or ECN is overfilling orders for the particular security during the trading session; (c) an average amount of time that the securities exchange or ECN offered a best price for the particular security relative to other order destinations; (d) a percentage of the trading session during which the securities exchange or ECN offered a best price for the particular security relative to other order destinations; (e) a number of times during the trading session at which the securities exchange or ECN offered a best price for the particular security relative to other order destinations; and (f) an average amount of time required during the trading session for the securities exchange or ECN to match a best price offered for the particular security by another order destination.

25. An apparatus comprising:

a processor; and

a storage device in communication with said processor and storing instructions adapted to be executed by said processor to:

determine during a trading session at least one attribute of a securities exchange or ECN; and

determine during the trading session, based at least in part on the determined at least one attribute, at least one of: (a) whether to route an order to the securities exchange or ECN, and (b) a proportion of the order to allocate to the securities exchange or ECN;

the determined at least one attribute selected from the group consisting of: (a) a percentage of total market volume in the particular security handled during the trading session by the securities exchange or ECN; (b) a degree to which the securities exchange or ECN is overfilling orders for the particular security during the trading session; (c) an average amount of time that the securities exchange or ECN offered a best price for the particular security relative to other order destinations; (d) a percentage of the trading session during which the securities exchange or ECN offered a best price for the particular security relative to other order

destinations; (e) a number of times during the trading session at which the securities exchange or ECN offered a best price for the particular security relative to other order destinations; and (f) an average amount of time required during the trading session for the securities exchange or ECN to match a best price offered for the particular security by another order destination.

26. An apparatus according to claim 25, the instructions further adapted to be executed to:

route at least part of the order to the securities exchange or ECN.

27-36. (Canceled).

37. A medium storing processor-executable process steps, the process steps comprising:

a processor-executable process step to determine during a trading session an attribute of a securities exchange or ECN, the determined attribute not being any one of: a quoted security price, an order size and an average response time; and

a processor-executable process step to determine during the trading session, based at least in part on the determined attribute, at least one of: (a) whether to route an order to the securities exchange or ECN, and (b) a proportion of the order to allocate to the securities exchange or ECN.

38. A medium according to claim 37, the process steps further comprising:

a processor-executable process step to route at least part of the order to the securities exchange or ECN.

39-42. (Canceled).

43. (Currently amended) A medium storing processor-executable process steps, the process steps comprising:

a processor-executable process step to determine during a trading session at least one attribute of a securities exchange or ECN; and

a processor-executable process step to determine during the trading session, based at least in part on the determined at least one attribute, at least one of: (a) whether to route an order to the securities exchange or ECN, and (b) a proportion of the order to allocate to the securities exchange or ECN;

the determined at least one attribute selected from the group consisting of: (a) a percentage of total market volume in the particular security handled during the trading session by the securities exchange or ECN; (b) a degree to which the securities exchange or ECN is overfilling orders for the particular security during the trading session; (c) an average amount of time that the securities exchange or ECN offered a best price for the particular security relative to other order destinations; (d) a percentage of the trading session during which the securities exchange or ECN offered a best price for the particular security relative to other order destinations; (e) a number of times during the trading session at which the securities exchange or ECN offered a best price for the particular security relative to other order destinations; and (f) an average amount of time required during the trading session for the securities exchange or ECN to match a best price offered for the particular security by another order destination.

44. A medium according to claim 43, the process steps further comprising:

a processor-executable process step to route at least part of the order to the securities exchange or ECN.

45-54. (Canceled).

APPENDIX B - EVIDENCE

No evidence is being submitted with this Appeal Brief (*i.e.*, this appendix is empty).

APPENDIX C - RELATED PROCEEDINGS

No prior or pending appeals, interferences, or judicial proceedings are known to Applicants, Applicants' legal representative, or assignee, which may be related to, directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal. Therefore, there are no copies of decisions rendered by a court or the Board to attach (*i.e.*, this appendix is empty).